



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: William E. BOSTICK et al.
Title: VIBRATION RESISTIVE STEERING WHEEL AND METHOD
Appl. No.: 10/657,831
Filing Date: 9/9/2003
Examiner: Matthew A. Johnson
Art Unit: 3682
Confirmation Number: 1748

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the New **Pre-Appeal Brief Conference Pilot Program**, announced July 11, 2005, this Pre-Appeal Brief Request is being filed together with a Notice of Appeal.

REMARKS

The Final Office Action that was mailed on May 2, 2008, has been reviewed and the Examiner's comments have been carefully considered. Claims 1-7, 21-22, and 24 stand rejected and are submitted for reconsideration.

Claims 1-7, 21-22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0023517 ("Ochiai") in view of JP-2002-154439 ("Keiichi"). The rejection should be withdrawn because Ochiai, Keiichi, or any combination thereof does not disclose, teach or suggest the claimed invention.

Ochiai does not teach or suggest the combination of features of claim 1. The core metal 11 of Ochiai comprises a rim core metal 15, a boss core metal 16 (or a boss plate), and a spoke core metal 17. (Paragraph 0041 of Ochiai.) The cover member W2 and the weight body W1 of Ochiai can be placed inside the rim core metal 15. (Figs. 4, 7 and 9-19 of

Ochiai.) The cover member W2 of Ochiai merely covers the weight body W1 and acts as a silencer. (Paragraph 0057 of Ochiai.) However, Ochiai does not teach or suggest at least one spring member extending about the periphery of the weight body W1. Keiichi does not cure the deficiencies of Ochiai because the rejection based on Ochiai and Keiichi is improper.

First, the rejection based on Keiichi and Ochiai is improper because the wheel case 1 of Keiichi is not equivalent to the cover member W2 of Ochiai. The steering wheel of Keiichi discloses a wheel case 1, an annular mass 2, and a resilient piece 3. The wheel case 1 is the rim section of the steering wheel to be grasped by an operator. (Paragraph 0011 of the machine translation of Keiichi (the Keiichi translation) provided in the appendix of the January 28, 2008, Reply.) It is asserted that the wheel case 1 is considered to be a sleeve of claim 1, but such an assertion is improper because the wheel case 1 is not secured within a portion of the rim of any metal core member, including the annular mass 2. Indeed, the wheel case 1 is the external material of the steering wheel. Furthermore, one with ordinary skill in the art would not consider the wheel case 1 to be analogous to the sleeve of claim 3 or the cover member W2 of Ochiai because it clearly provides the function of being grasp by an operator, which would be analogous to the cover portion 12 of Ochiai.

It is argued in paragraph 3 of the Office Action that “[r]egarding the term ‘sleeve’, Merriam Webster’s Collegiate Dictionary tenth edition provides the following definition for the term sleeve: ‘a tubular part designed to fit over another part.’ The wheel casing (1) of Keiichi meets the broadest reasonable interpretation of ‘a sleeve’.” It is respectfully submitted that this analysis is improper. When combining Ochiai and Keiichi in the present case, the meaning of a sleeve should be applied uniformly. The assertion that the wheel case 1 of Keiichi is a sleeve is inconsistent with the assertion that the cover member W2 of Ochiai is a sleeve because these element have different configurations and functions, i.e. the wheel case 1 of Keiichi is meant to be grasped by an operator while the cover member W2 of Ochiai can be placed inside the rim core metal and acts as a silencer. The assertion that the wheel case 1 of Keiichi is equivalent to the cover member W2 of Ochiai (upon which the obviousness rejection relies) is tantamount to changing the function of the wheel case of Keiichi. MPEP 2143 provides that a finding of obviousness based on combining prior art elements according to known methods to yield predictable results is not established if there is no finding that each element merely would have performed the same function as it did

separately. In this case, because the function of the wheel case of Keiichi has to be changed so as to be equivalent to the cover member of W2 of Ochiai, such an interpretation for the wheel case of Keiichi is improper and any rejection based on such an interpretation is similarly improper. Thus, the rejection should be withdrawn.

Second, the rejection based on Keiichi and Ochiai is improper because the annular mass 2 of Keiichi is equivalent to the metal core 11 of Ochiai. It is asserted that the annular mass 2 of Keiichi is considered to be a dampening element of claim 1, but such an assertion is improper because, if the annular mass 2 of Keiichi is a dampening element, Keiichi would not teach a metal core member with a portion of a rim in which the dampening element is secured. Indeed, the annular mass 2 of Keiichi is the metal core member itself. At best, the annular mass 2 of Keiichi would be analogous to the metal core 11 of Ochiai because they provide the same function of providing the basic metal skeleton for the gripping portion of the steering wheel. One with ordinary skill in the art would understand the annular mass 2 of Keiichi to be equivalent to the metal core 11 of Ochiai, and would not view the annular mass 2 of Keiichi to be an element to be placed in the metal core 11 of Ochiai. Because of the obviousness rejection is based on the improper assertion that one of ordinary skill in the art would view the annular mass 2 of Keiichi to be an element to be placed in the metal core 11 of Ochiai, the rejection is improper. Thus, the rejection should be withdrawn.

Third, the rejection based on Keiichi and Ochiai is improper because there is no reason to use the resilient pieces 3 of Keiichi in the device of Ochiai. The resilient piece 3 and the annular mass 2 of Keiichi are used as a dynamic damper for the spring-mass system of Keiichi in which the resilient piece 3 is disposed between the inside of wheel case 1 and the annular mass 2 of Keiichi. (See paragraph 0010 of the Keiichi translation.) The proposed reason in paragraph 2 of the Office Action for using the resilient pieces of Keiichi in the device of Ochiai (i.e., to couple the inside surface of the cover member W2 resiliently with the weight body W1) is inapplicable because the cover member W2 is coupled to the weight body W1 in nearly all the embodiments of Ochiai by virtue of the cover member 2 being molded (adhered) integrally with the weight body W1. (Paragraph 0060 of Ochiai.) For these embodiments, one with ordinary skill in the art would not have a reason to interject another element between two pieces that are adhered together for the purposes of “coupling” them.

The only exceptions in Ochiai in which the cover member W2 does not adhere to the weight body W1 of Ochiai are the embodiments shown in Figs. 11 and 12 of Ochiai. However, to couple the weight body W1 to the cover member W2 using the resilient pieces of Keiichi in the embodiments of Figs. 11 and 12 of Ochiai would make these embodiments unsatisfactory of their intended purpose. The whole principle of operation of the device of Keiichi is to have the weight body W1 be movable (received but not fixed) in the core metal 11 so that the weight W moves during vibration of the core metal 11. (Paragraph 0090 of Ochiai.) During this vibration, the weight W abuts on the internal wall of the core metal 11, which is slightly delayed relative to the vibration of the core metal 11. *Id.* The frequency of the slightly delayed vibration of the weight W interferes with the frequency of the vibration of the core metal 11, thus dampening the vibration of the core metal 11. *Id.* To use the resilient pieces of Keiichi between the weight body W1 and the cover member W2 in the embodiments of Figs. 11 and 12 of Ochiai would prevent the weight body W1 from moving within the core metal 11, thus preventing the vibration dampening effect sought in Ochiai. Such a modification of the embodiments of Figs. 11 and 12 of Ochiai would defeat the principle of operation of the device of Ochiai, thus making the embodiments of Figs. 11 and 12 unsatisfactory of their intended purpose. Such a modification is non-obvious, as provided in MPEP 2143.01. Therefore, the rejection is improper because there is no reason to use the resilient pieces of Keiichi in the device of Ochiai because most embodiments of Ochiai have the cover member W2 adhered to the weight body W1 and those embodiments of Ochiai that do not cannot be modified for the reason that the principle of operation for these embodiments would be defeated. Thus, the rejection should be withdrawn.

Finally, the rejection based on Keiichi and Ochiai is improper because the proposed combination of Ochiai and Keiichi does not teach or suggest all the features of claim 1. For example, the dampening element, the at least one spring member, and the sleeve being secured within a portion of the rim of the core metal member, as recited in claim 1, is not disclosed in Ochiai, Keiichi, or any combination thereof. It is asserted that the proposed combination would result in such a configuration, because “the sleeve and the dampening element of Ochiai are disclosed in the rim” and “the addition of the spring member around the periphery of the dampening element taught by Keiichi would also be within a portion of the rim.” (Paragraph 2 of the Office Action.) As previously mentioned, the annular mass 2 of

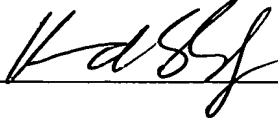
Keiichi is not a dampening element (secure within a portion of the rim of a metal core member) but is, at best, the metal core member itself. In addition, the wheel case 1 of Keiichi is not a sleeve (secured within a portion of the rim of the metal core member) but is, at best, a material covering the rim and at least one dampening element. When the wheel case 1 and the annular mass 2 of Keiichi are properly interpreted to be equivalent to the material covering the rim and at least one dampening element and the metal core member, respectively, as one of ordinary skill in the art would interpret these elements, there is nothing to teach or suggest that the annular mass 2 and the resilient pieces 3 of Keiichi are meant to be secured within any metal core member. At best, one with ordinary skill in the art would be motivated to place the resilient pieces 3 between the core metal 11 of Ochiai and the cover portion 12 of Ochiai because the core metal 11 of Ochiai is analogous (in function and design) to the annular mass 2 of Keiichi and the cover portion 12 of Ochiai is analogous (in function and design) to the wheel case 1 of Keiichi. Thus, any proposed combination of Ochiai and Keiichi would not teach or suggest the resilient pieces 3 of Keiichi secured within the portion of the rim of the core metal 11 of Ochiai. Accordingly, no combination of Ochiai and Keiichi teaches or suggests all the features of claim 1, and the rejection should be withdrawn.

Claims 2-7, 21-22, and 24 depend from and contain all the features of claim 1, and are allowable therewith for at least the same reasons set forth above, without regard to the further patentable limitations contained therein.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance.

Respectfully submitted,

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